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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,589	02/20/2004	Kevin T. Look	X-1462-2P US	1594

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EXAMINER	
CHANG, DANIEL D	
ART UNIT	PAPER NUMBER
2819	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/783,589	LOOK ET AL.	
	Examiner	Art Unit	
	Daniel D. Chang	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7-14,16 and 19* is/are rejected.

7)☒ Claim(s) *2-6,15,17,18 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/20/04, 4/19/04, 8/03/04, 5/30/06, 8/18/06, 3/17/08, 4/21/08, 8/19/08.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7-9, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Houston (US 5,615,162).

Regarding claim 1, Houston discloses, in Figs. 2 and 7, a method of operating a programmable logic device comprising:

applying a full supply voltage (col. 3, lines 13+) to operate one or more active blocks of the programmable logic device (col. 4, lines 36+); and

applying a reduced supply voltage (col. 3, lines 4+) to operate one or more inactive blocks of the programmable logic device (also see col. 5, lines 25+).

Regarding claims 7-9 and 12, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Claims 13, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Olah (US 6,114,843).

Regarding claim 13, Olah discloses, in Figs. 2, 3, and 5a, a programmable logic device comprising:

a first voltage supply terminal (2320) configured to receive a first supply voltage (Vccext);

a plurality of programmable logic blocks (2010); and

a plurality of high voltage transistors (high voltage is a relative term and therefore 2210 is broadly interpreted as high voltage transistors), wherein each of the transistors has a gate, a first source/drain region coupled to the first voltage supply terminal, and a second source/drain region coupled to a corresponding one of the programmable logic blocks (2210 coupled to 2010); and

a plurality of control circuits (310, 520, 331), each configured to provide a control voltage (Vref, V'ccint, output of 331) to the gate of a corresponding one of the high voltage transistors.

Regarding claim 14, Olah discloses, in Figs. 2, 3, and 5a, a plurality of user control terminals (drains of 531 and 532 in Fig. 5a), each configured to provide a corresponding user control signal (ON or OFF) to a corresponding one of the control circuits (520).

Regarding claim 16, Olah discloses, in Figs. 2, 3, and 5a, a plurality of configuration memory cells (541, 542), each configured to provide a corresponding configuration data bit to a corresponding one of the control circuits (520).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houston in view of Keeth (US 5,946,257).

Regarding claim 10, the teachings of Houston have been discussed above.

Houston does not teach that the reduced supply voltage is performed in response to configuration data bits.

However, Keeth teaches a disable circuit that is controlled using a configuration data bits (non-volatile circuit 947).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have provided the standby signal of Houston with the configuration data bits (947) as taught by Keeth in order to provide a programmed data bits.

Regarding claim 11, Keeth disclose defining the configuration data bits during design time of the programmable logic device (col. 10, lines 30).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olah in view of Kaplinsky (US 5,568,062).

Regarding claim 10, the teachings of Olah have been discussed above.

Olah does not teach that the plurality of high voltage transistors comprise a plurality of n-channel transistors.

However, Kaplinsky discloses that a p-channel transistor can be replaced by an n-channel transistor with an addition of an inverter at the gate of the n-channel transistor to minimize power dissipation (col. 3, lines 5+).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to have replaced the plurality of p-channel transistors of Olah with a plurality of n-channel transistors with an addition of an inverter at each of the gate of the n-channel transistor as taught by Kaplinsky in order to minimize power dissipation.

Allowable Subject Matter

Claims 2-6, 15, 17, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel D. Chang/
Primary Examiner, Art Unit 2819